

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PESTICIDE PROGRAMS

June 6, 1996

MEMORANDUM

Subject:

Review of Acute Toxicity Data for Precautionary Labeling;

EPA ID No. 279-3134; Questor™ MUP Insecticide

DP Barcode:

D224694

Active Ingredient:

059101; Chlorpyrifos (ANSI)

Registrant:

FMC Corporation

Agricultural Products Group

Philadelphia, PA 19103.

From:

S. Oonnithan

Precautionary Review Section

Registration Support Branch

Registration Division (H7505W)

To:

Dennis Edwards, PM 19

Insecticide-Rodenticide Branch Registration Division (H75O5C)

BACKGROUND

In a previous review of acute toxicity studies submitted by the registrant, the Agency has classified the acute oral toxicity as supplementary (Memoranda dated 02/26/92, W. S. Woodrow, Pyrinex MUP Insecticide and 04/26/93, W. S. Woodrow, ChlorGuard MUP Insecticide). To satisfy this deficiency, FMC Corporation has submitted a new acute oral toxicity study (MRID No. 439577-01) for Questor MUP Insecticide. The sample used for acute toxicity testing was a clear liquid (pH = 6.8-7.0); Ref. No. PL94-353. The submitted study was performed by FMC Corporation Toxicology Laboratory, Princeton, NJ.



FORMULATION FROM LABEL

Ingredient(s)	<u>% by wt.</u>
Chlorpyrifos (ANSI)	62.5
Chlorpyrilos (Alvoi)	37.5
Inerts	100.0
Total	100.0

USE DIRECTIONS

Questor MUP Insecticide is a Manufacturing Use Product intended for the formulation of end-use products for indoor and outdoor residential uses.

RECOMMENDATION

The acute toxicity profile from the previous review and current submission are summarized below.

Guide Line No. and Study Type	Tox. Category	Core Grade ^a
81-1: Acute Oral	II	A^b
81-2: Acute Dermal	III .	G ^c
81-3: Acute Inhalation	III	G ^c
81-4: Primary Eye Irritation	IV	Ğ ^c
81-5: Primary Dermal Irritation	IV	G ^c
81-6: Dermal Sensitization	Mild sensitizer	M ^c

^a A = Acceptable, G = Guideline, M = Minimum.

^b Current submission

LABELING

The appropriate signal word is WARNING.

PRECAUTIONARY STATEMENT

May be fatal if swallowed. Harmful if absorbed through skin or inhaled. Avoid contact with eyes, skin or clothing. Avoid breathing vapor. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash clothing before reuse.

Previously reviewed; Memoranda dated 02/26/92 (W. S. Woodrow, Pyrinex MUP Insecticide) and 04/26/93 (W. S. Woodrow, ChlorGuard MUP Insecticide).

STATEMENTS OF PRACTICAL TREATMENT

IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water. Do not induce vomiting. May pose an aspiration pneumonia hazard due to petroleum distillate. If person is unconscious, do not give anything by mouth and do not induce vomiting.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

NOTE TO PM

CHILD RESISTANT PACKAGING is not required because the product is packaged (Application for Pesticide, EPA Form 8570-1, dated 01/30/92) in ≥30 gallon containers [40 CFR §157.24(2)(C)].

DATA REVIEW FOR ACUTE ORAL TOXICITY TESTING (§81-1)

Product Manager: 19 MRID No.: 439577-01 Author(s): C. Freeman Reviewer: S. Oonnithan Report No.: A95-4255 Report Date: 01/17/96

Testing Facility: FMC Corp. Toxicology Lab., Princeton, NJ. Test Material: Questor MUP Insecticide (Lot No. PL94-353).

Test Animal: Rat; Sprague-Dawley; Age: Young Adults; Weight: 208-263 g (Male); 203-257 g (Female); Source: Charles River Labs.

Test Conditions: Based on a range finding study, the test substance was diluted in corn oil (50% [w/v]) to conduct the definitive study.

Results:

The significant clinical symptoms noted were ataxia, exophthalmos, loss of muscle control and righting reflex, piloerection, etc. All survivors gained weight. Among survivors, no internal lesions were observed and among non-survivors, ulcerated or thin smooth stomach linings, dark red fluid-filled stomachs, and hemorrhagic thymus were noted upon necropsy. The mortality data are summarized below.

Dosage		Number Dead/Tested		
(mg/kg)	ml/animal	Males	Females	Combined
500	0.21-0.25	5/5	5/5	10/10
400	0.16-0.19	5/5	5/5	10/10
250	0.10-0.13	5/5	5/5	10/10
240	0.11-0.12	4/5		4/5
225	0.096-0.10	0/5		0/5
200	0.088-0.11	0/5	2/5	2/10
100	0.045-0.5252	0/5	0/5	0/10

Conclusion:

LD₅₀: 192 mg/kg (Female): 235 mg/kg (Males); 199 mg/kg (Combined)

Toxicity Category: II

Classification: Acceptable

Statement of Compliance (40 CFR §160.12): Included

Procedure Deviations from §81-1: None

ACUTE TOXICITY ONE-LINER

EPA ID No.: 279-3134; Questor MUP Insecticide

DP Barcode: D224694

Active Ingredient: 059101; Chlorpyrifos (ANSI)
Applicant: FMC Corp Agricultural Products Group

Test Material: Questor MUP Insecticide

Date: June 6, 1996

G.L. #, Animal, Test Laboratory, Study #, Date	MRID No.	Results	Tox. Cat.	Core Grade ^a
81-1, Rat, FMC Corp. Tox. Lab., A95-4255, 01/17/96	439577-01	LD ₅₀ 192 mg/kg (Female)	П	Α

A = Acceptable